Purpose of Study

The purpose of this study was to assess selected components of prenatal care provided to Michigan Medicaid enrollees who experienced a delivery during 1999. Early prenatal care reduces risk to both mother and fetus, including the likelihood of premature labor, low birth weight, and complications at birth. Ongoing routine prenatal care prior to and after delivery have been associated with positive maternal and infant outcomes. Maternal Support Services can also contribute to positive birth outcomes for at-risk women.

The population for the prenatal study included women who delivered during calendar year 1999, and who were enrolled continuously for a minimum of 43 days prior to delivery. There were 14,929 enrollees in the prenatal study population for Michigan Medicaid Managed Care, and 1,796 within the study sample, of which 1,196 records were received. The prenatal care review evaluated all care provided from the initial care visit through the postpartum visit, even when care was provided outside of the 1999 calendar year. For example, for an enrollee who delivered in January 1999, all care provided was reviewed even though the majority of care was provided in 1998.

The criteria used to evaluate care were developed in accordance with the American College of Obstetricians and Gynecologists and policies defined by Michigan Medicaid and the Health Care Financing Administration (HCFA). The following study questions were developed to assess prenatal care processes:

- When does the initiation of prenatal care occur?
- What is the frequency of ongoing services?
- What is the MSS screening and service utilization rate?
- What is the frequency of post-partum visits?

There are several limitations that must be considered when reviewing the External Quality Review (EQR) prenatal care study results. A large number of Medicaid beneficiaries were enrolled into managed care plans in 1999, and Program L enrollment into Qualified Health Plans (QHP) also increased. Pregnancy is the qualifying condition for Medicaid eligibility for Program L enrollees, thus they are never enrolled into a health plan at initiation of pregnancy. The 1998 EQR assessed initiation of prenatal care in the first trimester and also required six months continuous enrollment. To more comprehensively assess prenatal care provided to women who become Medicaid eligible under Program L, the study methodology was revised to assess the initiation of prenatal care in the first trimester or within 42 days of enrollment.

Results

Initiation of Prenatal Care

The results for this indicator demonstrated that 58% of women received prenatal care in the first trimester of pregnancy or within 42 days of enrollment. Figure 1.1 displays the rates for the initial prenatal visit in the first trimester or within 42 days of enrollment.

The EQR 1997 and EQR 1998 studies reported that 63% and 50% of women, respectively, received prenatal care with an initial visit in the first trimester. A revised calculation that allows a more direct comparison between EQR 1998 and EQR 1999 by excluding those enrolled less than six months demonstrated a 52% weighted aggregate for EQR 1999.

The EQR 1999 aggregate rates for women's first prenatal visit in each successive trimester or within 42 days of enrollment were 58%, 26% and 5%. Overall, 98% of enrollees received prenatal care at some point in their pregnancy. The trimester of the first prenatal visit was unable to be determined in 10% of cases reviewed for EQR 1999 and 9% for EQR 1998.

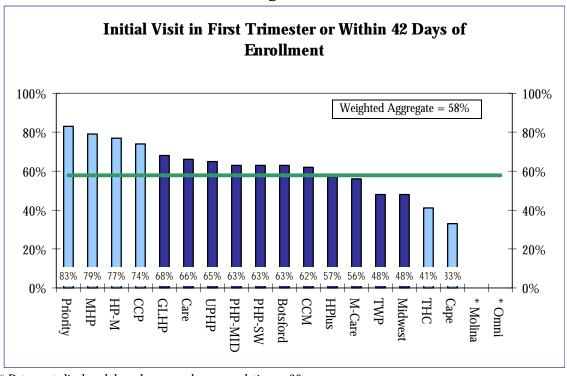


Figure 1.1

^{*} Rates not displayed; based on sample or population < 30.

Frequency of Ongoing Prenatal Care

The calculations for the frequency of ongoing prenatal visits were based on the 1999 HEDIS specifications. The recommended number of visits was calculated using the beneficiary enrollment date and the date of delivery. Figure 1.2 displays the percent of pregnant enrollees by QHP who received at least 80% of their recommended number of visits. For example, the continuously enrolled woman who delivered a full-term infant should have received 14 prenatal visits. If she received 12 prenatal visits, the calculated frequency of ongoing prenatal care would be 86%. If a beneficiary enrolled in a QHP in the fourth month of pregnancy, there would be 11 expected visits, and the calculation would use this number as the denominator.

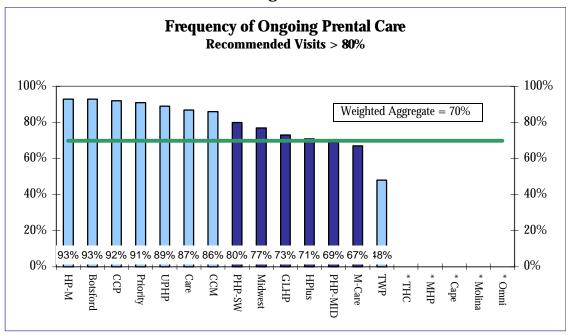


Figure 1.2

^{*} Rates not displayed; based on sample or population < 30.

Overall, 70% of the enrollees achieved a frequency for ongoing prenatal care rates above 80%, which was higher than the EQR 1998 rate of 51%. This demonstrated significant improvement in this aspect of prenatal care. Figure 1.3 describes the aggregate proportion of women who received given percentages of ongoing visits.

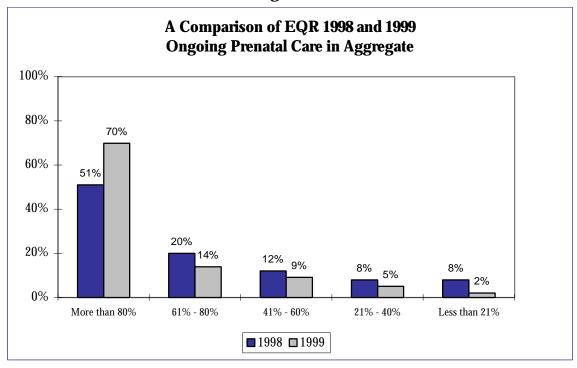


Figure 1.3

Postpartum Care

The postpartum visit to the health care provider is an important component of perinatal care. Assessment of physical and psychological status can be performed at that visit. As shown in Figure 1.4, 54% of enrollees presented for a postpartum visit within two months after delivery. This was above the EQR 1998 weighted aggregate rate of 45%. The National Medicaid HEDIS Database/Benchmark project reported a postpartum visit within three to eight weeks after delivery in 44% of cases reviewed.

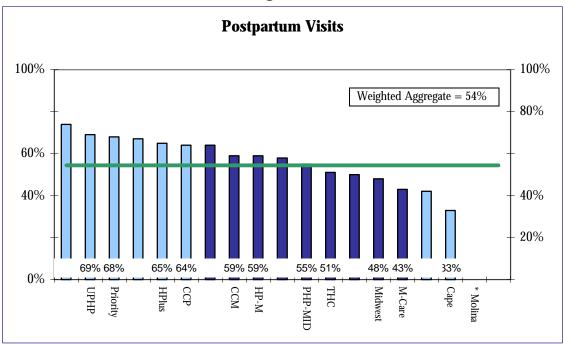


Figure 1.4

^{*} Rates not displayed; based on sample or population < 30.

MSS Screening

⇒ 59% of enrollees received MSS screening as part of their perinatal care

Maternal Support Services screening is performed by the health care provider to evaluate the enrollee's need for specific assistance related to psychosocial issues such as substance abuse, spousal abuse, and home and work issues that might affect the pregnancy. The screening may result in referral for infant care instruction or for nutritional assistance programs. In 59% of records reviewed, documentation of the components of screening for MSS issues was noted, which was lower than the EQR 1998 weighted aggregate rate of 64%. The EQR 1997 study reported a weighted aggregate rate of 49%. EQR 1999 information is displayed in Figure 1.5. This information was collected from both medical records and administrative data.

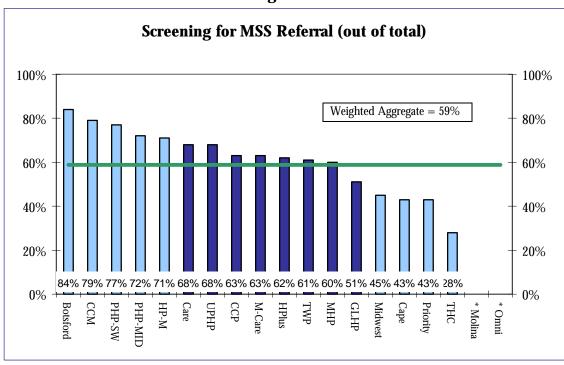


Figure 1.5

^{*} Rates not displayed; based on sample or population < 30.

MSS Risk Criteria

□ 55% of the women met at least one risk criterion for referral

EQR 1999 results demonstrated that 55% of women met at least one risk criterion as established by MDCH MSS policy for referral. Figure 1.6 shows the number of pregnant women who met at least one of the risk criteria for referral. These women may or may not have been screened by the health care provider. Nurse reviewers also identified risk criteria through medical record review.

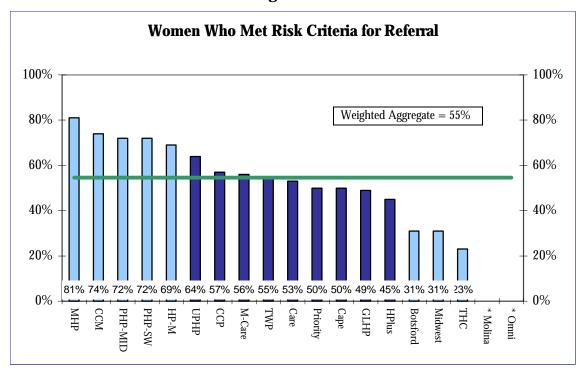


Figure 1.6

^{*} Rates not displayed; based on sample or population < 30.

Referral for MSS Services

⇔ 67% of the women who met at least one risk criterion had a documented referral for MSS services

A referral for MSS services ensures appropriate follow-up for those enrollees determined to be at risk. Health care providers are encouraged to refer those women at risk for a formal MSS assessment to determine whether services are appropriate. EQR 1999 results indicated that 67% of those considered at risk were referred for formal MSS assessment (See Figure 1.7).

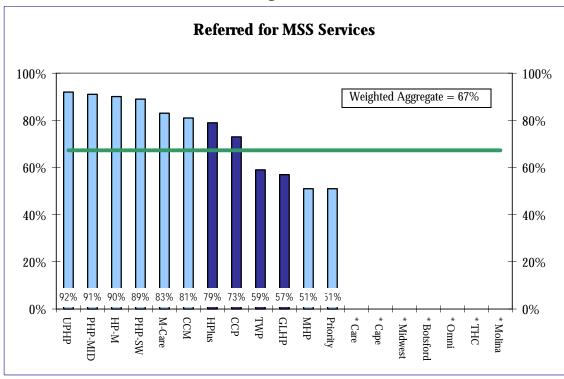


Figure 1.7

 $^{^{\}ast}$ Rates not displayed; based on sample or population < 30.

Received MSS Services

□ 59% of women who were at risk received MSS services

EQR 1999 results indicated that 59% of women considered to be at risk received MSS services. There were no comparable data from EQR 1997 or 1998. Figure 1.8 identifies the total number of women who met the risk criteria and received MSS services. This information was collected from both medical records and administrative data.

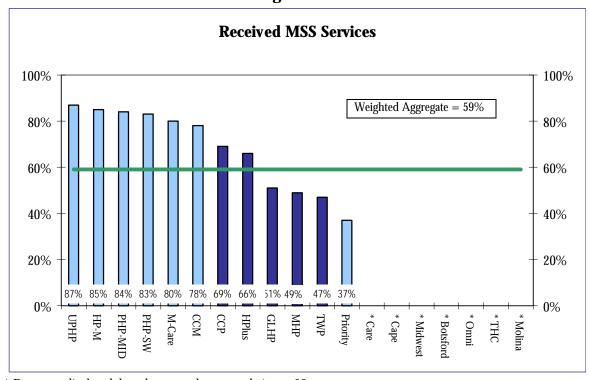


Figure 1.8

 $^{^{\}ast}$ Rates not displayed; based on sample or population < 30.

No Prenatal Care

□ 2% of enrollees presented for delivery with no documented prenatal care

Unfortunately it is not uncommon for women to present to the hospital emergency room in labor without receiving any prenatal care. The EQR 1999 results demonstrate that 2% of enrollees presented for delivery without the benefit of prenatal care. This was lower than the 1998 national average of 3.9% of women receiving late or no care.

DiscussionReview year 1999 was MPRO's fourth period of study for EQR. Although indicators and the focus studies have changed and evolved over time, it is important to review data findings to determine whether any significant trends can be discerned that might be important for improvement efforts.

There was improvement in the frequency of ongoing prenatal care. EQR 1999 demonstrated that 70% of the enrollees received greater than 80% of the recommended visits, compared to 51% of enrollees reported in EQR 1998. There were no comparable data for 1997. Seven QHPs demonstrated rates higher than the weighted aggregate for this indicator.

The EQR 1999 screening rate of 59% is lower than the rate reported in 1998 but is higher than the EQR 1997 rate of 49%. This demonstrates a sustained improvement in MSS screening practices.

The EQR 1999 initial visit in the first trimester rate is similar to the 1998 rate. The EQR 1999 post partum visit rate of 54% is higher than the rate reported in 1998 and is similar to the EQR 1997 rate. Table 1.1 displays the weighted aggregate comparison data for EQR 1997, 1998 and 1999.

Table 1.1 EQR 1997-1998-1999 Prenatal Care Results in Aggregate

	Weighted Aggregate					
Prenatal Indicators	1997	1998	1999			
Initial visit in first trimester	63%	50%	58% *			
Frequency of ongoing care > 80%		51%	70%			
Screening for MSS referral	49%	64%	59%			
Post partum visits	53%	45%	54%			

^{*} This is the 1999 reported rate; the 1999 calculated rate comparable to 1998 was 52%.

In order to review overall prenatal care results across the QHPs, a numeric score was assigned based upon performance as it related to the weighted aggregate. The score assigned was "three" when the QHP's rate was significantly above the weighted aggregate, "two" when the QHP's rate was not significantly different from the weighted aggregate or "one" when the QHP's rate was significantly below the weighted aggregate. These scores were then averaged for each QHP. Table 1.2 shows the QHPs ranked from highest to lowest according to their composite score along with their indicator level averages.

Table 1.2 EQR 1999 Summary of Indicator Results

E&R 1333 Summary of Indicator Results								
dнь	Initial Visit in 1st Trimester	Frequency of Ongoing Care	Post Partum Visit	Screened for MSS	Referred for MSS	Received MSS Services	Average Score	
HP-M	3	3	2	3	3	3	2.83	
Botsford	2	3	3	3	*	*	2.75	
CCM	2	3	2	3	3	3	2.67	
UPHP	2	3	3	2	3	3	2.67	
CCP	3	3	3	2	2	2	2.50	
PHP-MID	2	2	2	3	3	3	2.50	
PHP-SW	2	2	2	3	3	3	2.50	
M-Care	2	2	2	2	3	3	2.33	
Care	2	3	2	2	*	*	2.25	
MHP	3	*	3	2	1	2	2.20	
HPlus	2	2	3	2	2	2	2.17	
GLHP	2	2	2	2	2	2	2.00	
Priority	3	3	3	1	1	1	2.00	
Midwest	2	2	2	1	*	*	1.75	
TWP	2	1	1	2	2	2	1.67	
THC	1	*	2	1	*	*	1.33	
Cape	1	*	1	1	*	*	1.00	
Molina	*	*	*	*	*	*	*	
Omni	*	*	*	*	*	*	*	

^{*} Rates based on sample or population < 30 not included in calculations.

Based on the calculations displayed in Table 1.2, Health Plan of Michigan, Botsford Health Plan, Community Care of Michigan, and Upper Peninsula Health Plan demonstrated the highest overall results for prenatal care. Health Plan of Michigan performed above the weighted aggregate in five of the six indicators included in the overall results for the prenatal care study.